

IN THE SPECIFICATION

Please insert the paragraph beginning at page 1, line 4, with the following paragraph:

--CROSS REFERENCE TO RELATED APPLICATION

This is a Continuation Application of PCT Application No. PCT/JP02/08428, filed on August 21, 2002, which was not published under PCT Article 21(2) in English. This application is based upon and claims the benefit of priority from the prior Japanese Patent Application Nos. 2001-251067, filed August 22, 2001, 2001-360436, filed November 27, 2001, 2001-370271, filed December 04, 2001, 2001-397463, filed December 27, 2001, and 2002-004318, filed January 11, 2002, the entire contents of which are incorporated herein by reference.--

Please replace the paragraph on page 10, lines 5-10, with the following.

Fourthly, they have found that alignment of openings of a weir-free perforated tray of a distillation column having a large column diameter is made uniform, the flow rate dropping along an edge of the opening is increased, and a proper amount of oxygen is made co-present within the column.

Please replace the paragraph on page 12, line 16 thru page 13, line 7, with the following.

A fifth aspect is concerned with a process of producing (meth)acrylic acid through respective steps of a collection step of bringing a reaction product gas containing (meth)acrylic acid obtained by vapor catalytic oxidation reaction into contact with an aqueous absorbing liquid to absorb the (meth)acrylic acid in the gas into the absorbing liquid, a preliminary purification step of removing the absorbing liquid and impurities from the resulting (meth)acrylic acid solution to obtain crude ~~(meth)acryl~~ (meth)acrylic acid, and a

purification step of obtaining purified ~~(meth)acryl~~ (meth)acrylic acid from the crude (meth)acrylic acid by purification including distillation of (meth)acrylic acid by vacuum distillation, the process being characterized in that a polymerization inhibitor solution is prepared using waste water containing (meth)acrylic acid generated in a vacuum source in the preliminary purification step and/or purification step and then fed into the collection step or subsequent steps thereto.

Please replace the paragraph on page 22, lines 5-9, with the following.

It should not be construed that the invention is limited thereto. Also, the tray and packing material can be used in combination of ~~one or more~~ two or more thereof as in the commonly employed ways.

Please replace the paragraph on page 31, lines 8-14, with the following.

Incidentally, in the embodiment of Fig. 6, a ratio (a/b) of the pipe size a of the discharge nozzle 102 to the pipe size b of the introduction nozzle 103 is preferably 0.5 or more, and especially preferably from 0.5 to 2. When the (a/b) is less than 0.5, the solids in the column bottom liquid are liable to be somewhat easily incorporated into the introduction nozzle ~~3~~ 103.

Please replace the paragraph on page 31, lines 15-21, with the following.

In any of the embodiments, since the introduction nozzle 103 is provided horizontally or ascending, the polymers and polymerization inhibitor contained in the column main body 101, pot part 110 or discharge nozzle 102 hardly enter the introduction nozzle ~~3~~ 103. Accordingly, it is prevented that these accumulate within the reboiler 105 to cause plugging.

Please replace the paragraph on page 40, line 24 thru page 41, lines 1-6, with the following.

As shown in Fig. 12, a crude acrylic acid solution from the production step of acrylic acid is introduced into a distillation column 301 in which a weir-free perforated tray 310 is horizontally provided in the plural number of stages and distilled, and a part of the column bottom liquid is circulated into a conduit 302, a reboiler 303, and a conduit 304 in that order. Also, the column bottom liquid is taken out as bottoms through a conduit 305 connecting to the ~~conduit~~ reboiler 303.

Please replace the paragraph on page 41, lines 17-23, with the following.

As shown in Fig. 13, the weir-free perforated tray 310 is provided a number of openings 315. The center of each of the openings 315 is positioned on each of intersections of an oblique lattice 313 comprising a first group 311 of lines aligned in parallel and at even intervals and a second group 312 of lines oblique to the first group of lines and aligned in parallel and at even intervals.

Please replace the paragraph on page 44, line 8 thru page 45, line 1, with the following.

In the case where the column diameter is small, it is preferable that the perforated tray is supported by a support ring (not illustrated) to be placed in the inner periphery of the column. When the column diameter is large, for the sake of keeping mechanical strength, it is preferable that the weir-free perforated tray is supported by a support beam (not illustrated) in addition to the support ring. With respect to the shape, construction, alignment, etc. of the support ring and the support beam, there are no particular limitations. However, in order to make the number of the openings ~~45~~ 315 to be covered by the support ring and the support

beam small as far as possible, it is preferable that the plane visible areas of the support ring and the support beam are as small as possible. Incidentally, in order to make these areas small while keeping the mechanical strength, for example, there is a method of increasing the tray thickness. In order to make it easy to set up or exchange the weir-free perforated tray, the weir-free perforated tray may be broken up into several pieces.